

ABSTRACT OF THE DISCLOSURE

[36] A powerplant system for a vehicle such as a hybrid UAV includes a miniature gas turbine engine and a gearbox assembly. The engine is mounted to the gearbox assembly through a support structure which provides for pivotal movement of the engine relative thereto. The input gear is engaged with two gears such that the pivoted engine arrangement permits the input gear to float until gear loads between the input gear and the first and second gear are balanced. Regardless of the gear teeth errors or gearbox shaft misalignments the input gear will float and split the torque between the two gears.